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## LAMPIRAN

Lampiran 1a. Tinggi Tanaman (cm) tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	31,3	27,0	32,5	90,8	30,3
	P1	27,8	33,0	29,3	90,0	30,0
	P2	22,8	31,8	27,3	81,8	27,3
	P3	33,8	32,5	34,8	101,0	33,7
Sub Total		115,5	124,2	123,8	363,5	
B1	P0	24,0	28,3	31,5	83,8	27,9
	P1	31,3	33,8	31,8	96,8	32,3
	P2	34,8	33,8	33,0	101,6	33,9
	P3	34,3	32,7	30,5	97,5	32,5
Sub Total		124,4	128,5	126,7	379,5	
B2	P0	32,2	36,5	32,8	101,4	33,8
	P1	36,8	36,5	34,5	107,8	35,9
	P2	34,3	33,5	36,8	104,5	34,8
	P3	37,5	34,3	33,8	105,5	35,2
Sub Total		140,7	140,8	137,8	419,2	
B3	P0	35,8	36,0	29,5	101,3	33,8
	P1	36,0	36,5	33,5	106,0	35,3
	P2	35,5	37,2	35,7	108,3	36,1
	P3	35,5	35,5	39,0	110,0	36,7
Sub Total		142,8	145,2	137,7	425,6	
Total		523,3	538,6	525,9	1587,7	33,1

Lampiran 1b. Sidik ragam Tinggi Tanaman Bawang Merah 90 HST

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	8,4	4,2	0,7	tn	3,3	5,4
Perlakuan	15	371,2	24,7	4,2	**	2,0	2,7
Faktor B	3	228,1	76,0	12,9	**	2,9	4,5
Faktor P	3	57,8	19,3	3,3	*	2,9	4,5
B*P	9	85,2	9,5	1,6	tn	2,2	3,1
Galat	30	176,9	5,9				
Total	47	556,5					
KK	7%						

Keterangan

- \* = Berpengaruh nyata
- \*\* = Berpengaruh sangat nyata
- tn = Berpengaruh tidak nyata

Lampiran 2a. Rata-Rata Pertambahan Jumlah Daun (helai) Hasil Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	3.4	3.5	3.0	9.9	3.3
	P1	4.8	3.1	2.8	10.8	3.6
	P2	2.2	3.2	3.5	8.9	3.0
	P3	3.4	3.6	3.5	10.5	3.5
Sub Total		13.9	13.3	12.8	40.0	
B1	P0	4.4	3.0	3.4	10.8	3.6
	P1	2.7	3.8	3.7	10.2	3.4
	P2	3.9	4.2	3.9	11.9	4.0
	P3	4.4	4.4	4.0	12.8	4.3
Sub Total		15.4	15.4	14.9	45.8	
B2	P0	3.8	3.7	3.6	11.2	3.7
	P1	3.9	4.1	3.9	11.8	3.9
	P2	3.2	4.1	4.4	11.6	3.9
	P3	4.2	4.2	4.6	13.0	4.3
Sub Total		15.0	16.0	16.5	47.6	
B3	P0	3.5	3.1	4.0	10.5	3.5
	P1	4.0	2.9	3.3	10.2	3.4
	P2	4.0	3.8	3.7	11.5	3.8
	P3	3.9	4.1	4.0	12.0	4.0
Sub Total		15.4	13.9	15.1	44.3	
Total		59.7	58.6	59.4	177.7	3.7

Lampiran 2b. Sidik ragam Jumlah Daun Tanaman 90 HST Setelah Tranformasi

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,0	0,0	0,1	tn	3,3	5,4
Perlakuan	15	6,0	0,4	1,6	tn	2,0	2,7
Faktor B	3	2,6	0,9	3,6	*	2,9	4,5
Faktor P	3	1,8	0,6	2,5	tn	2,9	4,5
B*P	9	1,6	0,2	0,7	tn	2,2	3,1
Galat	30	7,4	0,2				
Total	47	13,4					
KK	13%						

Keterangan

\* = Berpengaruh nyata

tn = Berpengaruh tidak nyata

Lampiran 2c. Rata-Rata Pertambahan Jumlah Daun (helai) Sebelum Transformasi Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	10.5	11.0	8.0	29.5	9.8
	P1	22.5	8.5	7.0	38.0	12.7
	P2	4.0	9.0	11.0	24.0	8.0
	P3	10.5	12.0	11.5	34.0	11.3
Sub Total		47.5	40.5	37.5	125.5	10.5
B1	P0	18.5	8.0	10.5	37.0	12.3
	P1	6.5	13.5	12.5	32.5	10.8
	P2	14.0	16.5	14.0	44.5	14.8
	P3	18.5	18.5	15.0	52.0	17.3
Sub Total		57.5	56.5	52.0	166.0	13.8
B2	P0	13.5	13.0	12.0	38.5	12.8
	P1	14.0	15.5	14.0	43.5	14.5
	P2	9.0	15.5	18.5	43.0	14.3
	P3	16.5	16.5	20.5	53.5	17.8
Sub Total		53.0	60.5	65.0	178.5	14.9
B3	P0	11.0	8.5	15.0	34.5	11.5
	P1	15.0	7.5	10.0	32.5	10.8
	P2	15.0	13.5	13.0	41.5	13.8
	P3	14.5	15.5	15.0	45.0	15.0
Sub Total		55.5	45.0	53.0	153.5	12.8
Total		213.5	202.5	207.5	623.5	13.0

Lampiran 2d. Sidik ragam Jumlah Daun Tanaman 90 HST Sebelum Tranformasi

SK	db	JK	KT	Fhit		Ftabel	
						0.05	0.01
Kelompok	2	3.8	1.9	0.1	tn	3.3	5.4
Perlakuan	15	312.7	20.8	1.6	tn	2.0	2.7
Faktor B	3	128.6	42.9	3.3	*	2.9	4.5
Faktor P	3	98.6	32.9	2.5	tn	2.9	4.5
B*P	9	85.5	9.5	0.7	tn	2.2	3.1
Galat	30	389.7	13.0				
Total	47	706.2					
KK	28%						

Keterangan

\* = Berpengaruh nyata

tn = Berpengaruh tidak nyata

Lampiran 3a. Rata-Rata Pertambahan Jumlah Umbi (buah) Hasil Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	2.1	2.2	1.9	6.2	2.1
	P1	2.4	1.7	1.9	6.1	2.0
	P2	1.9	2.0	2.2	6.1	2.0
	P3	2.6	2.0	2.1	6.8	2.3
Sub Total		9.1	8.0	8.1	25.2	
B1	P0	1.4	1.0	1.7	4.1	1.4
	P1	1.7	2.3	2.2	6.3	2.1
	P2	2.4	2.7	2.4	7.6	2.5
	P3	2.3	2.3	2.3	7.0	2.3
Sub Total		7.9	8.4	8.8	25.1	
B2	P0	2.0	2.0	1.9	5.9	2.0
	P1	2.1	1.7	1.4	5.3	1.8
	P2	2.0	2.3	2.5	6.9	2.3
	P3	2.1	2.4	2.2	6.8	2.3
Sub Total		8.2	8.5	8.1	24.8	
B3	P0	2.1	2.1	2.5	6.8	2.3
	P1	2.1	2.0	2.0	6.1	2.0
	P2	2.1	2.1	2.1	6.4	2.1
	P3	2.0	2.3	2.4	6.8	2.3
Sub Total		8.4	8.6	9.1	26.1	
Total		33.6	33.5	34.1	101.2	2.1

Lampiran 3b. Sidik ragam Jumlah Umbi Tanaman Bawang Merah Hasil Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,0	0,0	0,1	tn	3,3	5,4
Perlakuan	15	3,2	0,2	3,4	**	2,0	2,7
Faktor B	3	0,1	0,0	0,4	tn	2,9	4,5
Faktor P	3	1,2	0,4	6,5	**	2,9	4,5
B*P	9	1,9	0,2	3,3	*	2,2	3,1
Galat	30	1,9	0,1				
Total	47	5,1					
KK	12%						

Keterangan

- \* = Berpengaruh nyata
- \*\* = Berpengaruh sangat nyata
- tn = Berpengaruh tidak nyata

Lampiran 3c. Sidik ragam Jumlah Umbi (buah) Tanaman Bawang Merah Sebelum Transformasi ( $\sqrt{x+0.5}$ )

Perlakuan		Ulangan			Total	Rata-
		I	II	III		
B0	P0	3.5	4.0	2.5	10.0	3.3
	P1	5.0	2.0	2.5	9.5	3.2
	P2	2.5	3.0	4.0	9.5	3.2
	P3	6.0	3.0	3.5	12.5	4.2
Sub Total		17.0	12.0	12.5	41.5	
B1	P0	1.0	0.0	2.0	3.0	1.0
	P1	2.0	4.5	4.0	10.5	3.5
	P2	5.0	6.5	5.0	16.5	5.5
	P3	4.5	4.5	4.5	13.5	4.5
Sub Total		12.5	15.5	15.5	43.5	
B2	P0	3.0	3.0	2.5	8.5	2.8
	P1	3.5	2.0	1.0	6.5	2.2
	P2	3.0	4.5	5.5	13.0	4.3
	P3	3.5	5.0	4.0	12.5	4.2
Sub Total		13.0	14.5	13.0	40.5	
B3	P0	3.5	3.5	5.5	12.5	4.2
	P1	3.5	3.0	3.0	9.5	3.2
	P2	3.5	3.5	3.5	10.5	3.5
	P3	3.0	4.5	5.0	12.5	4.2
Sub Total		13.5	14.5	17.0	45.0	
Total		56.0	56.5	58.0	170.5	3.6

Lampiran 3d. Sidik ragam Jumlah Umbi Tanaman Bawang Merah Sebelum Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0.05	0.01
Kelompok	2	0.1	0.1	0.1	tn	3.3	5.4
Perlakuan	15	48.8	3.3	3.0	**	2.0	2.7
Faktor B	3	1.0	0.3	0.3	tn	2.9	4.5
Faktor P	3	19.6	6.5	6.1	**	2.9	4.5
B*P	9	28.1	3.1	2.9	*	2.2	3.1
Galat	30	32.2	1.1				
Total	47	81.1					
KK	29%						

Keterangan

- \* = Berpengaruh nyata  
 \*\* = Berpengaruh sangat nyata  
 tn = Berpengaruh tidak nyata

Lampiran 4a. Rata-Rata Pertambahan Diameter Umbi (cm) Hasil Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	2.0	1.9	2.0	6.0	2.0
	P1	1.8	1.8	2.2	5.9	2.0
	P2	1.8	1.9	1.7	5.3	1.8
	P3	2.3	2.3	2.3	7.0	2.3
Sub Total		8.0	7.9	8.2	24.2	
B1	P0	1.6	1.0	1.7	4.3	1.4
	P1	2.0	2.4	2.6	6.9	2.3
	P2	2.3	2.0	2.2	6.5	2.2
	P3	2.2	2.0	2.2	6.4	2.1
Sub Total		8.2	7.4	8.6	24.2	
B2	P0	2.3	1.9	2.3	6.5	2.2
	P1	2.0	2.2	1.7	5.9	2.0
	P2	2.0	1.9	2.1	6.0	2.0
	P3	2.3	2.6	2.0	6.9	2.3
Sub Total		8.7	8.7	8.0	25.3	
B3	P0	2.3	2.3	2.2	6.8	2.3
	P1	1.9	2.5	2.3	6.8	2.3
	P2	2.0	2.4	1.9	6.3	2.1
	P3	2.4	2.5	2.4	7.3	2.4
Sub Total		8.6	9.7	8.9	27.2	
Total		33.4	33.7	33.8	100.9	2.1

Lampiran 4b. Sidik ragam Diameter Umbi Tanaman 90 HST Setelah Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,0	0,0	0,0	tn	3,3	5,4
Perlakuan	15	2,7	0,2	3,7	**	2,0	2,7
Faktor B	3	0,5	0,2	3,5	*	2,9	4,5
Faktor P	3	0,8	0,3	5,3	**	2,9	4,5
B*P	9	1,4	0,2	3,2	*	2,2	3,1
Galat	30	1,5	0,0				
Total	47	4,2					
KK	11%						

Keterangan

- \* = Berpengaruh nyata  
 \*\* = Berpengaruh sangat nyata

Lampiran 4c. Rata-Rata Pertambahan Diameter Umbi (cm) Sebelum Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	3.2	2.7	3.0	8.9	3.0
	P1	2.4	2.3	4.1	8.7	2.9
	P2	2.2	2.7	1.8	6.6	2.2
	P3	4.4	4.4	4.5	13.2	4.4
Sub Total		12.1	11.9	13.3	37.3	
B1	P0	1.6	0.0	2.0	3.6	1.2
	P1	3.0	4.7	5.6	13.3	4.4
	P2	4.5	3.1	3.7	11.3	3.8
	P3	4.1	3.0	3.7	10.7	3.6
Sub Total		13.1	10.8	14.9	38.8	
B2	P0	4.4	2.7	4.1	11.2	3.7
	P1	3.2	3.9	1.8	8.9	3.0
	P2	3.0	2.8	3.3	9.0	3.0
	P3	4.4	5.8	2.9	13.1	4.4
Sub Total		14.9	15.1	12.1	42.1	
B3	P0	4.1	4.2	4.0	12.3	4.1
	P1	2.8	5.5	4.5	12.8	4.3
	P2	3.0	4.7	2.8	10.4	3.5
	P3	4.7	5.3	4.9	14.9	5.0
Sub Total		14.6	19.6	16.2	50.3	
Total		54.7	57.4	56.4	168.4	3.5

Lampiran 4d. Sidik ragam Diameter Umbi Tanaman 90 HST Sebelum Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0.05	0.01
Kelompok	2	0.2	0.1	0.1	**	3.3	5.4
Perlakuan	15	41.5	2.8	3.4	**	2.0	2.7
Faktor B	3	8.5	2.8	3.5	*	2.9	4.5
Faktor P	3	13.2	4.4	5.5	**	2.9	4.5
B*P	9	19.9	2.2	2.7	*	2.2	3.1
Galat	30	24.2	0.8				
Total	47	65.9					
KK	26%						

Keterangan

\* = Berpengaruh nyata

\*\* = Berpengaruh sangat nyata

Lampiran 5a. Rata-Rata Pertambahan Berat Segar Brangkasian (g) per Polybag Hasil Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	10.9	8.8	8.2	27.9	9.3
	P1	10.1	8.7	8.1	26.9	9.0
	P2	5.0	16.0	8.9	29.9	10.0
	P3	21.0	13.8	20.6	55.4	18.5
Sub Total		47.0	47.3	45.8	140.1	11.7
B1	P0	13.2	8.2	10.4	31.8	10.6
	P1	9.3	24.0	23.3	56.6	18.9
	P2	23.0	27.2	22.3	72.5	24.2
	P3	26.1	19.0	18.2	63.3	21.1
Sub Total		71.6	78.4	74.2	224.2	
B2	P0	19.1	15.3	18.1	52.5	17.5
	P1	22.6	21.2	18.9	62.7	20.9
	P2	12.0	18.8	27.0	57.8	19.3
	P3	22.0	30.8	25.0	77.8	25.9
Sub Total		75.7	86.1	89.0	250.8	
B3	P0	22.2	19.2	23.0	64.4	21.5
	P1	19.4	24.6	23.6	67.6	22.5
	P2	20.8	25.9	18.5	65.2	21.7
	P3	26.5	35.6	27.5	89.6	29.9
Sub Total		88.9	105.3	92.6	286.8	
Total		283.2	317.1	301.6	901.9	18.8

Lampiran 5b. Sidik ragam Berat Segar Tanaman per Polybag 90 HST Setelah Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,4	0,2	0,9	tn	3,3	5,4
Perlakuan	15	24,7	1,6	6,7	**	2,0	2,7
Faktor B	3	14,4	4,8	19,5	**	2,9	4,5
Faktor P	3	6,7	2,2	9,1	**	2,9	4,5
B*P	9	3,5	0,4	1,6	tn	2,2	3,1
Galat	30	7,4	0,2				
Total	47	32,5					
KK	11%						



Keterangan

\*\* = Berpengaruh sangat nyata

tn = Berpengaruh tidak nyata

Lampiran 5c. Rata-Rata Pertambahan Berat Segar Tanaman (g) per Polybag  
Sebelum Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	10.9	8.8	8.2	27.9	9.3
	P1	10.1	8.7	8.1	26.9	9.0
	P2	5.0	16.0	8.9	29.9	10.0
	P3	21.0	13.8	20.6	55.4	18.5
Sub Total		47.0	47.3	45.8	140.1	11.7
B1	P0	13.2	8.2	10.4	31.8	10.6
	P1	9.3	24.0	23.3	56.6	18.9
	P2	23.0	27.2	22.3	72.5	24.2
	P3	26.1	19.0	18.2	63.3	21.1
Sub Total		71.6	78.4	74.2	224.2	
B2	P0	19.1	15.3	18.1	52.5	17.5
	P1	22.6	21.2	18.9	62.7	20.9
	P2	12.0	18.8	27.0	57.8	19.3
	P3	22.0	30.8	25.0	77.8	25.9
Sub Total		75.7	86.1	89.0	250.8	
B3	P0	22.2	19.2	23.0	64.4	21.5
	P1	19.4	24.6	23.6	67.6	22.5
	P2	20.8	25.9	18.5	65.2	21.7
	P3	26.5	35.6	27.5	89.6	29.9
Sub Total		88.9	105.3	92.6	286.8	
Total		283.2	317.1	301.6	901.9	18.8

Lampiran 5d. Sidik ragam Berat Segar Tanaman per Polybag 90 HST Sebelum  
Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0.05	0.01
Kelompok	2	36.0	18.0	1.0	tn	3.3	5.4
Perlakuan	15	1727.2	115.1	6.4	**	2.0	2.7
Faktor B	3	974.4	324.8	18.2	**	2.9	4.5
Faktor P	3	516.7	172.2	9.6	**	2.9	4.5
B*P	9	236.1	26.2	1.5	tn	2.2	3.1
Galat	30	536.4	17.9				
Total	47	2299.6					
KK	23%						

Keterangan

\*\* = Berpengaruh sangat nyata

tn = Berpengaruh tidak nyata

Lampiran 6a. Rata-Rata Pertambahan Berat Kering Brangkas (g) per Polybag Hasil Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	3.0	2.7	2.7	8.5	2.8
	P1	2.9	2.8	2.7	8.3	2.8
	P2	2.6	3.2	2.8	8.6	2.9
	P3	4.2	3.4	4.1	11.6	3.9
Sub Total		12.8	12.0	12.3	37.0	
B1	P0	2.9	2.9	2.9	8.8	2.9
	P1	2.8	4.4	4.4	11.6	3.9
	P2	4.3	4.6	4.2	13.1	4.4
	P3	4.4	3.8	4.1	12.3	4.1
Sub Total		14.5	15.7	15.6	45.8	
B2	P0	4.1	3.4	3.7	11.2	3.7
	P1	4.2	4.0	3.5	11.8	3.9
	P2	3.1	3.7	4.4	11.2	3.7
	P3	4.0	4.9	4.2	13.1	4.4
Sub Total		15.4	16.0	15.8	47.2	
B3	P0	4.1	4.0	4.3	12.4	4.1
	P1	3.7	4.3	4.3	12.3	4.1
	P2	3.9	4.4	3.5	11.9	4.0
	P3	4.5	5.0	4.5	14.0	4.7
Sub Total		16.3	17.7	16.6	50.6	
Total		58.9	61.5	60.3	180.7	3.8

Lampiran 6b. Sidik ragam Berat Kering Tanaman per Polybag 90 HST Hasil Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,2	0,1	0,6	tn	3,3	5,4
Perlakuan	15	16,2	1,1	6,4	**	2,0	2,7
Faktor B	3	8,4	2,8	16,5	**	2,9	4,5
Faktor P	3	4,6	1,5	9,1	**	2,9	4,5
B*P	9	3,2	0,4	2,1	tn	2,2	3,1
Galat	30	5,1	0,2				
Total	47	21,4					
KK	11%						

Keterangan

\*\* = Berpengaruh sangat nyata  
 tn = Berpengaruh tidak nyata

Lampiran 6c. Rata-Rata Pertambahan Berat Kering Brangkas (g) per Polybag Sebelum Transformasi ( $\sqrt{x+0.5}$ ) Tanaman Bawang Merah 90 HST

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	8.3	6.4	6.3	21.0	7.0
	P1	7.5	6.6	6.1	20.2	6.7
	P2	5.8	9.1	6.8	21.7	7.2
	P3	16.5	10.3	15.8	42.6	14.2
Sub Total		38.1	32.4	35.0	105.5	
B1	P0	7.6	7.6	7.6	22.8	7.6
	P1	6.8	18.2	18.4	43.4	14.5
	P2	17.5	20.4	16.5	54.4	18.1
	P3	18.6	13.4	15.7	47.7	15.9
Sub Total		50.5	59.6	58.2	168.3	
B2	P0	15.9	10.7	12.5	39.1	13.0
	P1	16.7	15.0	11.6	43.3	14.4
	P2	8.4	12.7	18.4	39.5	13.2
	P3	15.2	22.6	16.8	54.6	18.2
Sub Total		56.2	61.0	59.3	176.5	
B3	P0	15.8	14.9	17.3	48.0	16.0
	P1	12.8	17.9	17.2	47.9	16.0
	P2	14.5	18.4	11.4	44.3	14.8
	P3	19.3	24.0	19.6	62.9	21.0
Sub Total		62.4	75.2	65.5	203.1	
Total		207.2	228.2	218.0	653.4	13.6


Lampiran 6d. Sidik ragam Berat Kering Tanaman per Polybag 90 HST Sebelum Transformasi ( $\sqrt{x+0.5}$ )

SK	db	JK	KT	Fhit		Ftabel	
						0.05	0.01
Kelompok	2	13.8	6.9	0.7	tn	3.3	5.4
Perlakuan	15	850.6	56.7	5.8	**	2.0	2.7
Faktor B	3	427.0	142.3	14.6	**	2.9	4.5
Faktor P	3	259.5	86.5	8.8	**	2.9	4.5
B*P	9	164.2	18.2	1.9	tn	2.2	3.1
Galat	30	293.3	9.8				
Total	47	1157.7					
KK	23%						

Keterangan

\*\* = Berpengaruh sangat nyata  
 tn = Berpengaruh tidak nyata

Lampiran 7a. Data Uji Analisis pH dan C-Organik Tanah Sebelum Pengaplikasian




**LABORATORIUM KIMIA DAN KESUBURAN TANAH**  
**DEPARTEMEN ILMU TANAH FAKULTAS PERTANIAN**  
**UNIVERSITAS HASANUDDIN**  
 Kampus Tamalanrea Jl. Perintis Kemerdekaan Km.10, Makassar  
 Telp. (0411) 587 076, Fax (0411) 587 076

**HASIL ANALISIS CONTOH TANAH**  
 Nomor : 032.T.LKKT/2021  
 Permintaan : Andi Habibah Nurannissyah Yusran  
 Asal Contoh/Lokasi : Enrekang  
 O b j e k : Penelitian  
 Tgl.Penerimaan : 8 Maret 2021  
 Tgl.Pengujian : 12 Maret 2021  
 J u m l a h : 1 Contoh Tanah Terganggu

Nomor Contoh			Tekstur (pipet)				Ekstrak 1:2,5		Terhadap Contoh Kering 105°C													
Urut	Laboratorium	Pengirim	Pasir	Debu	Liat	Klas Tekstur	pH		Bahan Organik				Nilai Tukar Kation (NH <sub>4</sub> -Acetat 1N, pH7)									
							H <sub>2</sub> O	KCl	Walkley & Black	Kjeldahl	CIN	Olsen	Ca	Mg	K	Na	Jumlah	KTK	KB	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	
			----- % -----						----- % -----				----- (cmol (+)-kg <sup>-1</sup> ) -----									
1	-	-	-	-	-	-	6,68	-	2,05	-	-	-	-	-	-	-	-	-	-	-	-	-

*Catatan :*  
 Hasil pengujian ini hanya berlaku bagi contoh yang diuji dan tidak untuk diperbanyak

Makassar, 20 Maret 2021



Devi Mulya Sari, MP  
 NIP. 195902201996011001

Lampiran 7b. Data Uji Analisis pH Tanah Setelah Pengaplikasian

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	6,6	6,0	6,5	19,1	6,4
	P1	6,5	6,5	6,4	19,4	6,5
	P2	6,6	6,5	6,7	19,7	6,6
	P3	6,6	6,9	6,6	20,1	6,7
Sub Total		26,2	25,9	26,2	78,3	
B1	P0	6,7	6,3	6,5	19,5	6,5
	P1	6,6	6,8	6,6	20,1	6,7
	P2	6,8	6,6	6,5	20,0	6,7
	P3	6,7	6,6	6,6	20,0	6,7
Sub Total		26,9	26,4	26,2	79,5	
B2	P0	7,1	7,0	6,9	21,0	7,0
	P1	6,8	6,7	6,9	20,4	6,8
	P2	6,7	6,4	6,7	19,8	6,6
	P3	7,1	6,8	6,8	20,8	6,9
Sub Total		27,7	27,0	27,3	82,0	
B3	P0	6,9	6,9	6,9	20,6	6,9
	P1	7,2	7,0	7,3	21,5	7,2
	P2	7,0	7,1	7,3	21,4	7,1
	P3	7,4	7,4	7,4	22,3	7,4
Sub Total		28,4	28,4	28,9	85,7	
Total		109,2	107,7	108,6	325,5	6,8

Lampiran 7c. Sidik ragam pH Tanaman Setelah Pengaplikasian

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,1	0,0	1,8	tn	3,3	5,4
Perlakuan	15	3,8	0,3	11,8	**	2,0	2,7
Faktor B	3	2,7	0,9	42,5	**	2,9	4,5
Faktor P	3	0,4	0,1	6,4	**	2,9	4,5
B*P	9	0,6	0,1	3,4	**	2,2	3,1
Galat	30	0,6	0,0				
Total	47	4,5					
KK	2%						

Keterangan

\*\* = Berpengaruh sangat nyata

tn = Berpengaruh tidak nyata

Lampiran 8a. Data Uji Analisis C-Organik Tanah Setelah Pengaplikasian



LABORATORIUM KIMIA DAN KESUBURAN TANAH  
 DEPARTEMEN ILMU TANAH FAKULTAS PERTANIAN  
 UNIVERSITAS HASANUDDIN  
 Kampus Tamalanrea Jl. Perintis Kemerdekaan Km. 10, Makassar  
 Telp. (0411) 587 076, Fax (0411) 587 076

**HASIL ANALISIS CONTOH TANAH**

Nomor : 0201.T.LKKT/2021  
 Permintaan : Andi Habibah Nurannissyah Yusran  
 Asal Contoh/Lokasi : Enrekang  
 O b j e k : Penelitian  
 Tgl.Penerimaan : 23 September 2021  
 Tgl.Pengujian : 28 September 2021  
 J u m l a h : 48 Contoh Tanah Terganggu

Nomor Contoh			Parameter
Urut	Laboratorium	Pengirim	Walkley & Black C
			----- % -----
1	HB 1	B0P0 U1	1,66
2	HB 2	B0P0 U2	1,87
3	HB 3	B0P0 U3	1,77
4	HB 4	B0P1 U1	1,84
5	HB 5	B0P1 U2	1,93
6	HB 6	B0P1 U3	2,02
7	HB 7	B0P2 U1	2,09
8	HB 8	B0P2 U2	2,06
9	HB 9	B0P2 U3	2,16
10	HB 10	B0P3 U1	1,74
11	HB 11	B0P3 U2	1,74
12	HB 12	B0P3 U3	1,69
13	HB 13	B1P0 U1	2,33
14	HB 14	B1P0 U2	2,37
15	HB 15	B1P0 U3	2,36
16	HB 16	B1P1 U1	2,63
17	HB 17	B1P1 U2	2,58
18	HB 18	B1P1 U3	2,41
19	HB 19	B1P2 U1	2,60
20	HB 20	B1P2 U2	2,64
21	HB 21	B1P2 U3	2,51
22	HB 22	B1P3 U1	2,60
23	HB 23	B1P3 U2	2,53
24	HB 24	B1P3 U3	2,49

Nomor Contoh			Parameter
Urut	Laboratorium	Pengirim	Walkley & Black C
			----- % -----
25	HB 25	B2P0 U1	2,50
26	HB 26	B2P0 U2	2,39
27	HB 27	B2P0 U3	2,49
28	HB 28	B2P1 U1	2,48
29	HB 29	B2P1 U2	2,58
30	HB 30	B2P1 U3	2,60
31	HB 31	B2P2 U1	2,00
32	HB 32	B2P2 U2	1,82
33	HB 33	B2P2 U3	2,59
34	HB 34	B2P3 U1	2,79
35	HB 35	B2P3 U2	1,99
36	HB 36	B2P3 U3	2,96
37	HB 37	B3P0 U1	2,82
38	HB 38	B3P0 U2	2,75
39	HB 39	B3P0 U3	2,73
40	HB 40	B3P1 U1	2,88
41	HB 41	B3P1 U2	2,96
42	HB 42	B3P1 U3	2,74
43	HB 43	B3P2 U1	3,16
44	HB 44	B3P2 U2	3,06
45	HB 45	B3P2 U3	3,18
46	HB 46	B3P3 U1	3,08
47	HB 47	B3P3 U2	3,13
48	HB 48	B3P3 U3	3,19

Catatan :  
 Hasil pengujian ini hanya berlaku bagi contoh yang diuji dan tidak untuk diperbanyak



Lampiran 8b. Data Uji Analisis C-Organik (%) Tanah Setelah Pengaplikasian

Perlakuan		Ulangan			Total	Rata-rata
		I	II	III		
B0	P0	1,7	1,9	1,8	5,3	1,8
	P1	1,8	1,9	2,0	5,8	1,9
	P2	2,1	2,1	2,2	6,3	2,1
	P3	1,7	1,7	1,7	5,2	1,7
Sub Total		7,3	7,6	7,6	22,6	
B1	P0	2,3	2,4	2,4	7,1	2,4
	P1	2,6	2,6	2,4	7,6	2,5
	P2	2,6	2,6	2,5	7,8	2,6
	P3	2,6	2,5	2,5	7,6	2,5
Sub Total		10,2	10,1	9,8	30,1	
B2	P0	2,5	2,4	2,5	7,4	2,5
	P1	2,5	2,5	2,6	7,5	2,5
	P2	2,0	1,8	2,6	6,4	2,1
	P3	2,8	2,0	3,0	7,7	2,6
Sub Total		9,8	8,7	10,6	29,1	
B3	P0	2,8	2,8	2,7	8,3	2,8
	P1	2,9	3,0	2,7	8,6	2,9
	P2	3,2	3,1	3,2	9,4	3,1
	P3	3,1	3,1	3,2	9,4	3,1
Sub Total		11,9	11,9	11,8	35,7	
Total		39,2	38,3	39,9	117,4	2,4

Lampiran 8c. Sidik ragam C-Organik Tanah Setelah Pengaplikasian

SK	db	JK	KT	Fhit		Ftabel	
						0,05	0,01
Kelompok	2	0,1	0,0	1,3	tn	3,3	5,4
Perlakuan	15	8,2	0,5	17,8	**	2,0	2,7
Faktor B	3	7,2	2,4	77,7	**	2,9	4,5
Faktor P	3	0,2	0,1	2,1	tn	2,9	4,5
B*P	9	0,8	0,1	3,0	*	2,2	3,1
Galat	30	0,9	0,0				
Total	47	9,3					
KK	7%						

Keterangan

\*\* = Berpengaruh sangat nyata

\* = Berpengaruh nyata

tn = Berpengaruh tidak nyata

## Lampiran 9a. Data Uji Analisis Populasi Bakteri Setelah Pengaplikasian



**LABORATORIUM PENELITIAN DAN PENGEMBANGAN SAINS  
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM  
UNIVERSITAS HASANUDDIN**  
Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245  
Telp. 0411-586016 • Fax. 0411-588551 • Email : lpps.fmipa.unhas@email.com

### LAPORAN HASIL PENGUJIAN

Nomor: LPPS.MJ-2111-6/2

Nama Pelanggan : Andi Habibah Nurannissyah Y  
*Customer Name*  
Alamat : Jl. Tondongkura No.8  
*Address*  
Jenis Sampel : Tanah  
*Type of Sample(s)*  
Tanggal Penerimaan : 09 November 2021  
*Received Date*  
Tanggal Analisis : 18 November 2021  
*Analysis Date*  
Email : habibah1504@gmail.com  
*Email*

Setelah dilakukan pengujian diperoleh hasil sebagai berikut:

Kode Sampel	Nama Sampel	Total Plate Count (CFU/g)
LPPS.M-21 11-6/2b	B3P3	$3,8 \times 10^5$

Deskripsi : - Metode Pengujian *Total Plate Count* (TPC) menggunakan media *Plate Count Agar* (PCA)

#### Catatan:

- Hasil Uji hanya berlaku untuk contoh tersebut di atas
- Dilarang mengutip/menyalin sebagian isi hasil uji ini

Makassar, 19 Desember 2021  
Penanggung Jawab Mutu  
  
Prof. Dr. Santia Hanjani, MS  
NIP. 196012151987022001



## LAMPIRAN

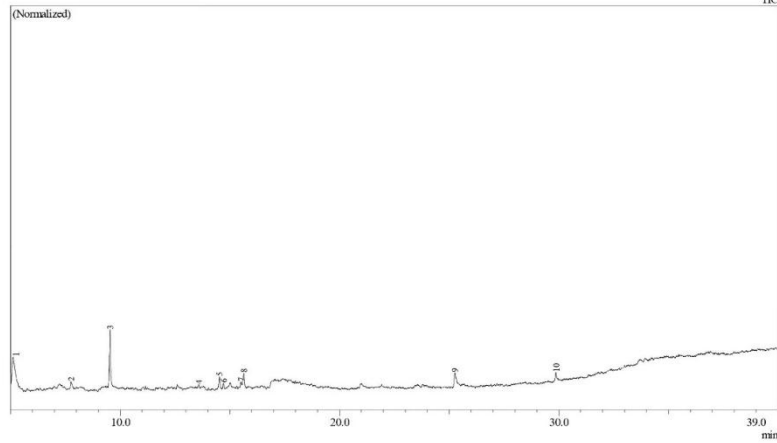
### Lampiran 10a. Data Uji Analisis Kadar Residu Pestisida di Tanah Sebelum Pengaplikasian

#### DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

Analyzed by : Admin  
Analyzed : 17/03/2021 4:47:26 PM  
Sample type : Unknown  
Level : 1  
Sample Name : Tanah  
Sample ID :  
IS Amount : [1]-1  
Sample Amount : 1

#### Sample Information

Chromatogram Tanah C:\GCMSsolution\Data\Project1\Tanah.qgd



Peak#	R. Time	Area	Area%	A/H Name
1	5.113	849527	34.98	9.82 1,1-HEPTANEDIOL, DIACETATE
2	7.763	76353	3.14	4.00 DECANE
3	9.535	717319	29.53	3.94 UNDECANE
4	13.585	100256	4.13	10.13 BIS(TRIMETHYLSIYL)-2-[HYDROXY-(ETHOXY)PHENYL]-2-HYDROXYPHEN
5	14.526	114355	4.71	3.17 BICYCLO[7.2.0]UNDEC-4-ENE, 4,11,11-TRIMETHYL-8-METHYLENE-, [1R-(1R
6	14.710	64092	2.64	3.53 AZULENE, 1,2,3,4,5,6,7,8-OCTAHYDRO-1,4-DIMETHYL-7-(1-METHYLETHENY
7	15.511	57185	2.35	3.31 Eudesma-4(14),11-diene
8	15.640	195354	8.04	4.44 AZULENE, 1,2,3,5,6,7,8,8A-OCTAHYDRO-1,4-DIMETHYL-7-(1-METHYLETHEN
9	25.262	172687	7.11	4.24 Chlorfenapyr
10	29.869	81713	3.36	3.64 1,2-BENZENEDICARBOXYLIC ACID
		2428841	100.00	

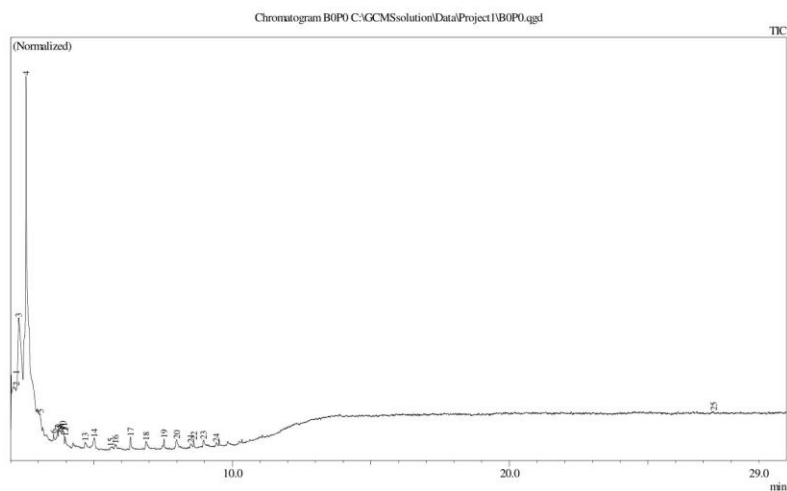
## LAMPIRAN

### Lampiran 10b. Data Uji Analisis Kadar Residu Pesticida di Tanah Setelah Pengaplikasian

HASIL ANALISIS GC-MS  
 KROMATOGRAM GC  
 NAMA : ANDI HABIBAH  
 SAMPEL : TANAH  
 KODE : B0P0

#### DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

Sample Information	
Analyzed by	: Admin
Analyzed	: 11/11/2021 12:06:15 PM
Sample Type	: Unknown
Level #	: 1
Sample Name	: B0P0
Sample ID	:
IS Amount	: [1]=1
Sample Amount	: 1



Peak#	R.Time	Area	Area%	A/H Name
1	2.019	274426	1.12	0.97 PROPANOIC ACID, 3-(ETHYL-1,1-D2-THIO)-
2	2.100	2110352	8.58	9.41 N-METHYL-N-(METHYL-D3)AMINOHEPTANE
3	2.287	5954636	24.21	10.22 SILANE, DIMETHOXYMETHYL-
4	2.560	13568249	55.17	7.37 Silanediol, dimethyl-
5	3.065	145368	0.59	2.83 Cyclotrisiloxane, hexamethyl-
6	3.547	88036	0.36	2.50 (S*,S*)-2-HYDROXY(4-METHOXY-2-TRIMETHYLSILYLPHENYL)METHYL-1-C
7	3.698	218488	0.89	3.36 CYCLOTETRASILOXANE, OCTAMETHYL-
8	3.742	144358	0.59	2.00 CYCLOTETRASILOXANE, OCTAMETHYL-
9	3.810	281429	1.14	4.21 Cyclotetrasiloxane, octamethyl-
10	3.871	197925	0.80	2.89 Cyclotetrasiloxane, octamethyl-
11	3.915	132512	0.54	2.11 Cyclotetrasiloxane, octamethyl-
12	3.971	80859	0.33	2.13 Decane
13	4.683	63603	0.26	2.27 BENZALDEHYDE, 2,5-BIS[(TRIMETHYLSILYL)OXY]-
14	5.010	255615	1.04	4.86 CYCLOPENTASILOXANE, DECAMETHYL-
15	5.605	72368	0.29	6.80 3-Ethoxy-1,1,1,5,5,5-hexamethyl-3-(trimethylsilyloxy)trisiloxane
16	5.776	91345	0.37	4.17 3,3,5-Triethoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane
17	6.329	148338	0.60	2.44 Cyclohexasiloxane, dodecamethyl-
18	6.886	135248	0.55	3.64 CYCLOPENTASILOXANE, DECAMETHYL-
19	7.534	84776	0.34	1.79 CYCLOHEPTASILOXANE, TETRADECAMETHYL-
20	7.987	138098	0.56	3.72 Cyclohexasiloxane, dodecamethyl-
21	8.498	73942	0.30	3.27 HEPTASILOXANE, HEXADECAMETHYL-
22	8.609	94222	0.38	2.56 CYCLOOCTASILOXANE, HEXADECAMETHYL-
23	8.957	109247	0.44	3.25 Cycloheptasiloxane, tetradecamethyl-
24	9.410	57593	0.23	3.63 CYCLODODECASILOXANE, TETRACOSAMETHYL-
25	27.367	72858	0.30	5.64 CYCLOTETRASILOXANE, HEXAMETHYL-
		24593891	100.00	

# LAMPIRAN

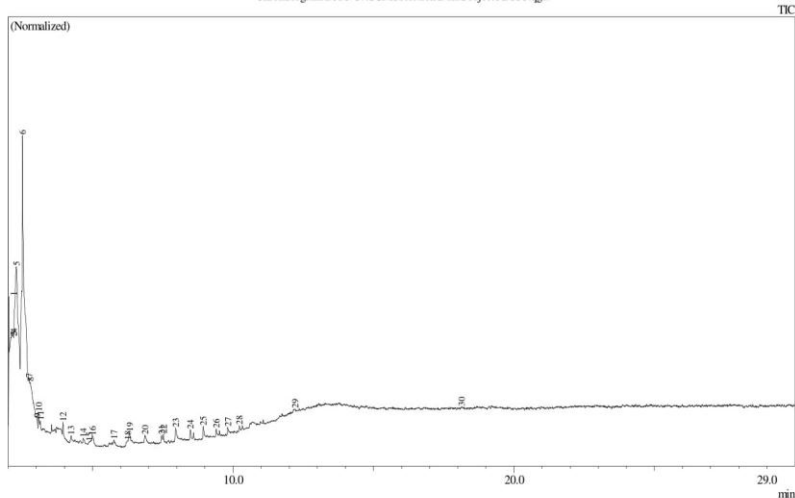
HASIL ANALISIS GC-MS  
 KROMATOGRAM GC  
 NAMA : ANDI HABIBAH  
 SAMPEL : TANAH  
 KODE : B3P3

## DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

Analyzed by : Admin  
 Analyzed : 11/11/2021 11:23:12 AM  
 Sample Type : Unknown  
 Level # : 1  
 Sample Name : B3P3  
 Sample ID :  
 IS Amount : [1]=1  
 Sample Amount : 1

### Sample Information

Chromatogram B3P3 C:\GCMSsolution\Data\Project1\B3P3.gcd



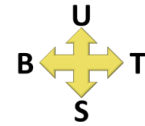
Peak#	R.Time	Area	Area%	A/H Name
1	2.020	487734	2.01	0.89 PROPANOIC ACID, 3-(ETHYL-1,1-D2-THIO)-
2	2.100	1672356	6.88	4.47 PROPANE, 2-FLUORO-2-METHYL-
3	2.125	568664	2.34	1.49 PROPANE, 2-FLUORO-2-METHYL-
4	2.164	1272015	5.24	3.26 N-METHYL-N-(METHYL-D3)AMINOHEPTANE
5	2.294	6883005	28.34	10.20 SILANE, DIMETHOXYMETHYL-
6	2.514	9050944	37.26	7.34 Silanediol, dimethyl-
7	2.745	539370	2.22	2.61 Silane, methylenebis[methyl-
8	2.785	1593258	6.56	8.30 3-HEXANOL, 3-ETHYL-
9	3.030	149288	0.61	3.60 Cyclotrisiloxane, hexamethyl-
10	3.081	147497	0.61	2.12 Benzoic acid, 2-methoxy-, methyl ester
11	3.145	75670	0.31	2.04 NONANE
12	3.950	94318	0.39	1.72 Decane
13	4.238	66675	0.27	2.63 BENZENE, 1,4-BIS(TRIMETHYLSILYL)-
14	4.672	67739	0.28	3.16 BENZALDEHYDE, 2,5-BIS[(TRIMETHYLSILYL)OXY]-
15	4.885	88461	0.36	8.63 CYCLOPENTASILOXANE, DECAMETHYL-
16	5.003	131390	0.54	3.79 Cyclopentasiloxane, decamethyl-
17	5.759	65989	0.27	2.70 3,3,5-Triisopropoxy-1,1,1,7,7,7-hexamethyl-5-(trimethylsilyloxy)tetrasiloxane
18	6.245	76013	0.31	4.11 Methanamine
19	6.321	195624	0.81	3.92 Cyclohexasiloxane, dodecamethyl-
20	6.873	137445	0.57	4.42 Cyclopentasiloxane, decamethyl-
21	7.459	77485	0.32	2.51 Cyclopentasiloxane, decamethyl-
22	7.525	71945	0.30	2.14 CYCLOHEPTASILOXANE, TETRADECAMETHYL-
23	7.965	172646	0.71	3.20 CYCLOHEXASILOXANE, DODECAMETHYL-
24	8.485	107961	0.44	2.60 HEPTASILOXANE, HEXADECAMETHYL-
25	8.945	135771	0.56	2.73 Cycloheptasiloxane, tetradecamethyl-
26	9.403	90643	0.37	2.68 CYCLODODECASILOXANE, TETRACOSAMETHYL-

Peak#	R.Time	Area	Area%	A/H Name
27	9.815	74370	0.31	2.49 CYCLOOCTASILOXANE, HEXADECAMETHYL-
28	10.225	64846	0.27	2.41 CYCLODODECASILOXANE, TETRACOSAMETHYL-
29	12.211	68687	0.28	5.47 PENTANAMIDE
30	18.138	63534	0.26	5.76 CYCLOTRIASILOXANE, HEXAMETHYL-
		24291343	100.00	

## LAMPIRAN

Lampiran 11a. Denah Penelitian Di Lapangan

Kelompok 1	Kelompok 2	Kelompok 3
B2P4	B4P4	B1P4
B3P4	B1P2	B2P3
B3P1	B4P3	B2P2
B1P4	B4P2	B4P1
B4P1	B1P1	B1P3
B3P2	B1P3	B4P3
B4P2	B3P1	B2P4
B3P3	B3P2	B2P1
B1P3	B3P4	B4P4
B4P3	B2P4	B3P2
B1P2	B2P2	B4P2
B4P4	B2P1	B3P1
B1P1	B4P1	B1P2
B2P3	B3P3	B3P4
B2P1	B1P4	B1P1
B2P2	B2P3	B3P3
Kelompok 1	Kelompok 2	Kelompok 3



**Keterangan :**

- B0P0 = 0% *Biochar* + 0 mL *Pseudomonas sp*
- B0P1 = 0% *Biochar* + 20 mL *Pseudomonas sp*
- B0P2 = 0% *Biochar* + 25 mL *Pseudomonas sp*
- B0P3 = 0% *Biochar* + 30 mL *Pseudomonas sp*
- B1P0 = 25% *Biochar* + 0 mL *Pseudomonas sp*
- B1P1 = 25% *Biochar* + 20 mL *Pseudomonas sp*
- B1P2 = 25% *Biochar* + 25 mL *Pseudomonas sp*
- B1P3 = 25% *Biochar* + 30 mL *Pseudomonas sp*
- B2P0 = 50% *Biochar* + 0 mL *Pseudomonas sp*
- B2P1 = 50% *Biochar* + 20 mL *Pseudomonas sp*
- B2P2 = 50% *Biochar* + 25 mL *Pseudomonas sp*
- B2P3 = 50% *Biochar* + 30 mL *Pseudomonas sp*
- B3P0 = 75% *Biochar* + 0 mL *Pseudomonas sp*
- B3P1 = 75% *Biochar* + 20 mL *Pseudomonas sp*
- B3P2 = 75% *Biochar* + 25 mL *Pseudomonas sp*
- B3P3 = 75% *Biochar* + 30 mL *Pseudomonas sp*

## LAMPIRAN



Gambar Lampiran 1. Proses pembuatan Biochar (kiri) dan Biochar tongkol jagung (Kanan)



Gambar Lampiran 2. Bahan umbi tanaman bawang merah yang akan ditanam (kiri). Tanaman bawang merah umur 14 HST (Kanan)

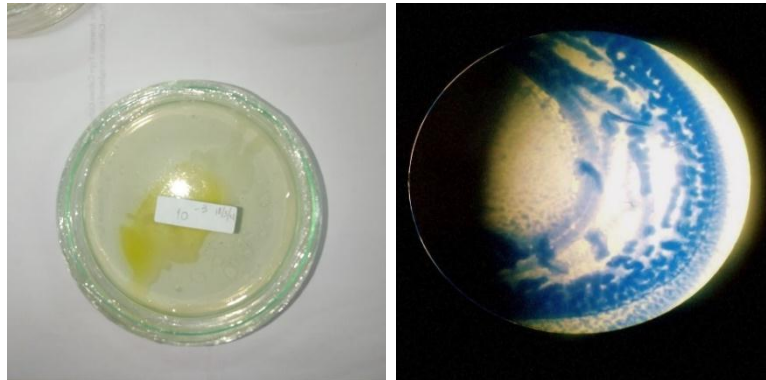


Gambar Lampiran 3. Green House CoE Teaching Farm Fakultas Pertanian Unhas (kiri). Tanaman bawang merah yang telah dipanen (kanan)

## LAMPIRAN



Gambar Lampiran 4. Pembuatan Media *Pseudomonas* Cetrimide Agar (kiri). Isolasi Bakteri *Pseudomonas* di Laminar Air Flow (kanan)



Gambar Lampiran 5. Hasil Isolasi Bakteri *Pseudomonas* ssp (kiri). Pengamatan Bentuk Sel Bakteri *Pseudomonas* ssp (kanan)



Gambar Lampiran 6. Hasil Perbanyakan bakteri *Pseudomonas* ssp pada Media NB (kiri). Proses pengamatan pH Tanah (kanan)

